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EXAMINER

FULLER, ERIC B

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 11/20/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

09/915,727

LOCKE ET AL.

Examiner

Art Unit

Eric B Fuller

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 13-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION*****Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11, 13-20, and 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. (US 5,962,618).

Primeaux teaches an elastomer coating material for use on a substrate. The coating material comprises an amine-terminated polyether polyol (column 4, lines 43-45) having a molecular weight greater than about 1500 and an amine equivalent weight greater than about 750 (column 4, lines 43-52) and an isocyanate compound (column 3, line 16). When mixed, these materials react to form a polyurea and cures substantially instantaneously (column 10, lines 13-28). The materials are mixed such that a predetermined tensile strength, hardness, and flexibility is achieved (column 2, lines 49-67). It is the Examiner's position that since this reference is applying the material to a large substrate such as a rail car and no means are taken to heat or cool the car, this reference reads on applying the material to the substrate at ambient temperatures. It is the position of the examiner that since the coating taught by Primeaux is the same as the coating claimed by the applicant, it would be inherent that the coating of Primeaux

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would act to attenuate vibration, noise, and harshness. As to claim 1, the reference fails to teach that the coating is applied in a manner that produces a tight, well-defined application pattern. However, to apply the coating in a tight, well-defined manner would have been obvious at the time the invention was made to a person having ordinary skill in the art. By doing so, one would control the distribution of the impact resistance property that the coating supplies to the surface of the substrate (column 2, lines 60-65).

As to claims 2 and 3, ambient temperature is conventionally defined to be well within the applicant's ranges.

As to claims 4 and 5, Primeaux does not explicitly teach the application pressure. However, it is the Examiner's position that because the pressures claimed by the applicant are inclusive of normal atmospheric pressure and Primeaux does not disclose that the coating is applied under a vacuum or in a high pressure system, that Primeaux reads on the applicant's claimed pressures.

As to claims 6 and 7, Primeaux teaches, by way of examples, that the amount of each compound in the material effects the cure time. The examples show cure times as low as less than 10 seconds and as high as 45 second and the compositions that are required for each. It is the Examiner's position that this reference is inclusive of cure times in between 10 and 45 seconds.

As to claims 8, Primeaux teaches to coat the interior of a rail car, which is conventionally made of metal stampings.

As to claim 9, although Primeaux fails to specifically teach that the substrate is a body in white, it is the position of the examiner that it would have been obvious to apply

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the coating of Primeaux to any substrate that would benefit from having additional abrasion and impact resistance.

As to claims 10 and 11, Primeaux teaches a high pressure, impingement mix spray system (column 8, lines 53-65).

Claim 13 is similar to claim 1, except that the "amine-terminated polymer" of claim 1 is replaced with a "polyoxalene polymer". However, the according to applicant's claim 16, the amine-terminated polyether polyols taught by Primeaux are polyoxalene polymers. Thus this claim is rejected for the reasons stated in claim 1.

As to claim 14, Primeaux teaches the use of chain extenders (abstract, column 5, line 53). Although Primeaux fails to explicitly teach the addition of fillers to the material, it does teach that fillers are commonly used in similar mixtures to increase hardness (column 2, line 6). To add fillers to the material taught by Primeaux would have been obvious at the time the invention was made to a person having ordinary skill in the art in order to increase the hardness of the compound.

As to claims 15, Primeaux teaches the use of pigments in the material. Primeaux fails to teach the use of a catalyst, specifically because the reaction and cure times are relatively small all ready. However, one skilled in the art would recognize the addition of a tertiary amine to the material would allow the reaction involving an amine-terminated polymer to occur even faster. The motivation to do so would be to achieve even faster reaction and cure times.

As to claim 16, Primeaux teaches to use polyether polyols, but is silent on the specific types. However, to use a di-, tri-, quad-, or penta- functional polyether polyol

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would have been obvious at the time the invention was made to a person having ordinary skill in the art with the reasonable expectation of success.

As to claim 17, column 3, lines 50-58, and column 8, lines 38-52, show that the isocyanate compound may consist of an isocyanate quasi-prepolymer based on a uretonimine modified MDI and a high molecular weight polyether polyol. The table in column 8 shows that that the isocyanate content in this form is between 0 and 65%. The 2,4'-isomer content should be at least 30% of this. The taught ranges are inclusive of the applicant's claimed ranges.

As to claim 18, an alkylene carbonate is used as a plasticizer in the material (column 4, line 23).

As to claim 19, to select any of the applicant's claimed plasticizers would have been obvious as they are all alkylene carbonates.

Claim 20 is similar to claims 1 and 13, but adds the limitation of the isocyanate compound having at least one NCO radical that is reactive with the first components. From table 1 and 4, and the examples, Primeaux teaches the use of the NCO radical that is inherently reactive with the first component.

As to claim 22, the average molecular weights given in column 4, lines 25-68, are between 1,000 and 4,000. Applicant's range is inclusive of these values.

As to claim 23, Primeaux teaches that an organic silane compound may be added in order to increase adhesion of the material (column 9, line 26).

Claims 24 and 25 contain limitations that have been previously rejected. These claims are rejected to for the same reasons.

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As to claims 26-29, these claims are rejected to for the same reason as claims 16-19.

Claims 21 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. (US 5,962,618) in view of Xiao et al. (US 6,153,709).

As to claim 21 and 30, Primeaux teaches to use aliphatic diamines as the chain extenders. Therefore, to use diethyltoluene diamine as the chain extender would have been obvious. However, Primeaux fails to teach the material that is the filler. The two references share the same broad constituents and require silimilar charactoristics. One would realize that the constituents that make up the filler in Xiao would be impart the same desireable characteristics to the material taught by Primeaux. Xiao teaches that talc is a common filler for materials such as these two coatings (column 3, line 18-38). To use talc as a filler for the material taught by Primeauz would have been obvious at the time the invention was made to a person having ordinary skill in the art in order to control viscosity, rheology, shelf stability, specific gravity, and cured performance properties.

Additionally to claim 30, Primeaux teaches that the amine terminated-polymer can be in the form of a diol (column 4, lines 30-35) with average molecular weights between 1,000 and 3,000. This is inclusive of applicant's "about 2,000".

The limitations of claim 31 have all been previously rejected to in other claims. The claim is therefore rejected to for the same reasons.

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As to claim 32, Primeaux teaches that the adhesion promoter may be epoxy alkoxy silane (column 7, lines 45-55).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent No. 6,291,019 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the limitations presented in the present claims are met by the claims of the patent. The differences are obvious variants of one another.

### ***Response to Arguments***

Applicant argues with respect to the previous rejections based on 35 USC 112.

These arguments are based on amendments made to the claims and evidence of the



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term "harshness" being a well known in the art. These arguments are convincing and the previous rejections based on 35 USC 112 have been withdrawn.

Applicant argues that Primeaux fails to teach that the coating is useful in attenuating noise, vibration, and harshness, and thus fails to teach or suggest that the coating would have such characteristics. This argument is found unconvincing. Although the reference may fail to teach that the coating has these characteristics, it is the position of the examiner that since the claimed coatings are identical to the coating taught by Primeaux, the coatings of Primeaux would inherently have these characteristics as well.

Applicant argues that Xiao fails to anticipate the claims as currently amended. Examiner agrees and has withdrawn the rejections based upon Xiao alone.

The applicant has acknowledged the double patenting rejection of the previous action, but has opted to defer the submission of a suitable Terminal Disclaimer until the resolution of all other issues. It is the position of the examiner that the double patenting rejection of the current office action is applicable to the claims as they presently read.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B Fuller whose telephone number is (703) 308-6544. The examiner can normally be reached on Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck, can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



EBF  
November 17, 2002



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